

	AUTUMN TERM		SPRING TERM		SUMMER TERM	
TOPIC:	SCIENCE <i>'Elements'</i>	CULTURE <i>'Four Corners of the World'</i>	PEOPLE <i>'Influential People'</i>	HISTORY <i>'In The Past'</i>	GEOGRAPHY <i>'Landscapes'</i>	ARTS <i>'That's Entertainment'</i>
<b>Year 3</b>	<b>Water</b>	<b>North</b>	<b>Writers</b>	<b>Ancient (Greeks)</b>	<b>Mountains</b>	<b>Film and Television</b>
	<p><b>Plants</b></p> <ul style="list-style-type: none"> <li>* identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers.</li> <li>* explore the requirements of plants for life and growth (air, light, water, nutrients from soil and room to grow) and how they vary from plant to plant.</li> <li>* investigate the way in which water is transported within plants.</li> <li>* explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.</li> </ul> <p><b>Observing changes over time</b> <u>Carrying out comparative fair tests</u></p> <ul style="list-style-type: none"> <li>Asking questions</li> <li>Make predictions</li> <li>Draw conclusions</li> <li>Evaluate their enquiry</li> </ul>	<p><b>Magnets &amp; Forces</b></p> <ul style="list-style-type: none"> <li>*compare how things move on different surfaces</li> <li>*notice that some forces need contact between two objects, but magnetic forces can act at a distance</li> <li>*predict whether two magnets will attract or repel each other, depending on which poles are facing</li> </ul> <p><b>Noticing patterns</b> <u>Grouping and classifying</u> <u>Carrying out comparative fair tests</u></p> <ul style="list-style-type: none"> <li>Ask questions</li> <li>Make predictions</li> <li>Decide how to carry out an enquiry</li> <li>Record data</li> </ul>	<p><b>Animals including humans</b></p> <ul style="list-style-type: none"> <li>*identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat</li> <li>* identify that humans and some other animals have skeletons and muscles for support, protection and movement</li> </ul> <p><b>Grouping and classifying</b> <u>Use secondary sources of information</u> <i>Answer questions using data</i> <i>Present data</i></p>	<p><b>Animals including humans</b></p> <ul style="list-style-type: none"> <li>*identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat</li> <li>* identify that humans and some other animals have skeletons and muscles for support, protection and movement</li> </ul> <p><b>Grouping and classifying</b> <u>Use secondary sources of information</u> <i>Answer questions using data</i> <i>Present data</i></p>	<p><b>Rocks</b></p> <ul style="list-style-type: none"> <li>*compare and group together different kinds of rocks on the basis of their appearance and simple physical properties</li> <li>*describe in simple terms how fossils are formed when things that have lived are trapped within rock</li> <li>*recognise that soils are made from rocks and organic matter</li> </ul> <p><b>Grouping and classifying</b> <u>Noticing patterns</u> <u>Carrying out comparative fair tests</u> <u>Collecting/recording results</u></p> <ul style="list-style-type: none"> <li>Ask questions</li> <li>Make predictions</li> <li>Take measurements</li> <li>Record data</li> <li>Draw conclusions</li> </ul>	<p><b>Light</b></p> <ul style="list-style-type: none"> <li>*recognise that they need light in order to see things and that dark is the absence of light</li> <li>*notice that light is reflected from surfaces</li> <li>*recognise that light from the sun can be dangerous and that there are ways to protect their eyes</li> <li>*recognise that shadows are formed when the light from a light source is blocked by an opaque object</li> <li>*find patterns in the way that the size of shadows change</li> </ul> <p><b>Observing changes over time</b> <u>Use secondary sources of information</u></p> <ul style="list-style-type: none"> <li>Ask questions</li> <li>Decide to carry out an enquiry</li> <li>Make predictions</li> <li>Take measurements</li> <li>Record data</li> <li>Draw conclusions</li> </ul>
<b>Year 4</b>	<b>Earth</b>	<b>East</b>	<b>Heroes and heroines</b>	<b>Invaders (Romans)</b>	<b>Oceans</b>	<b>Art and Sculpture</b>
	<p><b>States of Matter</b></p> <ul style="list-style-type: none"> <li>*compare and group materials together, according to whether they are solids, liquids or gases</li> <li>*observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius</li> <li>* identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature</li> </ul>	<p><b>Sound</b></p> <ul style="list-style-type: none"> <li>*identify how sounds are made, associating some of them with something vibrating</li> <li>*recognise that vibrations from sounds travel through a medium to the ear</li> <li>*find patterns between the pitch of a sound and features of the object that produced it</li> <li>*find patterns between the volume of a sound and the strength of the vibrations that produced it</li> <li>*recognise that sounds get fainter as the distance from the sound source increases</li> </ul>	<p><b>Animals including humans</b></p> <ul style="list-style-type: none"> <li>*describe the simple functions of the basic parts of the digestive system in humans</li> <li>*identify the different types of teeth in humans and their simple functions</li> <li>*construct and interpret a variety of food chains, identifying producers, predators and prey</li> </ul>	<p><b>Electricity</b></p> <ul style="list-style-type: none"> <li>*identify common appliances that run on electricity</li> <li>*construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers</li> <li>*recognise some common conductors and insulators, and associate metals with being good conductors</li> </ul>	<p><b>Living things and their habitats</b></p> <ul style="list-style-type: none"> <li>*recognise that living things can be grouped in a variety of ways</li> <li>*explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment</li> <li>*recognise that environments can change and that this can sometimes pose dangers to living things</li> </ul>	

	<u>Observe changes over time</u> <u>Fair testing</u> <u>Grouping and classifying</u> Measuring, predicting, collecting data, recording data, ask and answer questions, draw conclusions	<u>Noticing patterns</u> <u>Finding things out</u> <u>Fair testing</u> Predicting, ask and answer questions, recording data, draw conclusions	<u>Observe changes over time</u> <u>Grouping and classifying</u> <u>Finding things out</u> Ask and answer questions, conclusions	<u>Fair testing</u> <u>Grouping and classifying</u> <u>Noticing patterns</u> Ask and answering questions, predicting, conclusions	<u>Grouping and classifying</u> <u>Finding things out</u> Ask and answer questions, draw conclusions, evaluate	
<b>Year 5</b>	<b>Air</b>	<b>South</b>	<b>Inventors</b>	<b>Tudors</b>	<b>Rivers</b>	<b>Music and Dance</b>
	<u>Motion and Forces</u> <u>Identify patterns in results</u> <u>Fair testing and Noticing patterns</u> Plan an investigation to answer question Collect evidence, draw conclusion and review/evaluate enquiry Take accurate measurements		<u>Animals including humans</u> *identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood *recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function *describe the ways in which nutrients and water are transported within animals, including humans.  <u>Observe changes over time</u> <u>Grouping and classifying</u> <u>Finding things out</u> Collect and present evidence	<u>Living things and their habitats</u> *describe the differences in the lifecycles of a mammal, an amphibian, an insect and a bird *describe the life process and reproduction in some plants and animals  <u>Identify patterns in results</u> <u>Fair testing</u> Collect and present evidence	<u>Animals including humans</u> *describe the changes as humans develop to old age  <u>Identify patterns in results</u> <u>Grouping and classifying</u> <u>Observe changes over time</u> Plan investigation and form conclusion	<u>Earth and Space</u> *describe the movement of the Earth, and other planets, relative to the Sun in the solar system *describe the movement of the Moon relative to the Earth *use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky <u>Observe changes over time</u> <u>Finding things out</u> Collect evidence (observation) and present evidence
<b>Year 6</b>	<b>Fire</b>	<b>West</b>	<b>Great Leaders</b>	<b>Egyptians</b>	<b>Deserts</b>	<b>Theatre</b>
	<u>Electricity</u> *associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit *compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches *use recognised symbols when representing a simple circuit in a diagram  <u>Identify patterns in results</u> <u>Fair testing</u> Make predictions Decide how to carry out an	<u>Evolution and Inheritance</u> *recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago *recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents *identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution  <u>Grouping and classifying</u>	<u>Living things and their habitats</u> *describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals *give reasons for classifying plants and animals based on specific characteristics  <u>Observe changes over time</u> <u>Comparative fair test</u> Observation and measure/Communication and sources Evaluate your enquiry	<u>(States of Matter)</u> *compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets *know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution *use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating	<u>Living things and their habitats</u> (Catch up topic from 2020-2021) *describe the differences in the lifecycles of a mammal, an amphibian, an insect and a bird *describe the life process and reproduction in some plants and animals  <u>Identify patterns in results</u> <u>Fair testing</u> Collect and present evidence	<u>Light</u> *recognise that light appears to travel in straight lines *use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye *explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes *use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them  <u>Fair tasting</u> Plan investigation

## Archbishop of York's CE Junior School Long Term Science Curriculum Overview

		<p><u>Finding things out</u> Drawing conclusions Record data Plan how to carry out an enquiry</p>		<p>*give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic *demonstrate that dissolving, mixing and changes of state are reversible changes *explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.</p> <p><u>Noticing patterns</u> Ask questions and make predictions</p>		<p>Take measurements Present data</p>
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